

[Doc. No. 5066, 29 FR 18291, Dec. 24, 1964, as amended by Amdt. 25–41, 42 FR 36970, July 18, 1977; Amdt. 25–87, 61 FR 28695, June 5, 1996; Amdt. 25–89, 61 FR 63956, Dec. 2, 1996]

## §25.832 Cabin ozone concentration.

- (a) The airplane cabin ozone concentration during flight must be shown not to exceed—
- (1) 0.25 parts per million by volume, sea level equivalent, at any time above flight level 320; and
- (2) 0.1 parts per million by volume, sea level equivalent, time-weighted average during any 3-hour interval above flight level 270.
- (b) For the purpose of this section, "sea level equivalent" refers to conditions of 25  $^{\circ}$ C and 760 millimeters of mercury pressure.
- (c) Compliance with this section must be shown by analysis or tests based on airplane operational procedures and performance limitations, that demonstrate that either—
- (1) The airplane cannot be operated at an altitude which would result in cabin ozone concentrations exceeding the limits prescribed by paragraph (a) of this section; or
- (2) The airplane ventilation system, including any ozone control equipment, will maintain cabin ozone concentrations at or below the limits prescribed by paragraph (a) of this section.

[Amdt. 25–50, 45 FR 3883, Jan. 1, 1980, as amended by Amdt. 25–56, 47 FR 58489, Dec. 30, 1982; Amdt. 25–94, 63 FR 8848, Feb. 23, 1998]

## §25.833 Combustion heating systems.

Combustion heaters must be approved.

[Amdt. 25–72, 55 FR 29783, July 20, 1990]

## PRESSURIZATION

## § 25.841 Pressurized cabins.

- (a) Pressurized cabins and compartments to be occupied must be equipped to provide a cabin pressure altitude of not more than 8,000 feet at the maximum operating altitude of the airplane under normal operating conditions.
- (1) If certification for operation above 25,000 feet is requested, the airplane must be designed so that occupants will not be exposed to cabin pressure altitudes in excess of 15,000 feet after any probable failure condition in the pressurization system.
- (2) The airplane must be designed so that occupants will not be exposed to a cabin pressure altitude that exceeds the following after decompression from any failure condition not shown to be extremely improbable:
- (i) Twenty-five thousand (25,000) feet for more than 2 minutes; or
- (ii) Forty thousand (40,000) feet for any duration.